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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,664

03/29/2005

Antonius Kalker

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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EXAMINER

WAMSLEY, PATRICK G

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/529,664

Applicant(s)

KALKER ET AL.

Examiner

Patrick G. Wamsley

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213. /

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: International Search Report.

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: -- Encoding a Decoding a Media Signal with High and Low Quality Versions. --

The disclosure is objected to because of the following informalities:

Page 2, line 12: Change "sohisticated" to -- sophisticated --.

Appropriate correction is required.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

Claims 3 and 7 are objected to because of the following informalities:

Claim 3, line 2: Change "and/or" to -- and --.

Claim 3, line 2: Change "encoder" to -- encoders --.

Claim 7, line 2: Change "and-or" to -- and --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112 & 101

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 5, 9, and 10 are rejected under 35 U.S.C. 112, second paragraph, as indefinite, and under 35 U.S.C. 101, as non-statutory.

A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite. See *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990). Such claims should also be rejected under 35 U.S.C. 101 based on the theory that the claim overlaps two different statutory classes of invention set forth in 35 U.S.C. 101, which is drafted so as to set forth the statutory classes of invention in the alternative only. See MPEP 2173.05(p).

Claim 5 and 9 recite both an "apparatus" and the "steps of a method," overlapping two different statutory classes. Claim 10 is even worse, describing a "product" on line 1, a "device" on line 2, and an "apparatus" on line 3. As best understood, the "computer program product" belongs to a different statutory class, not qualifying as either a device or an apparatus. Thus, it is indefinite and non-statutory because it mixes claim types to different classes of invention in a single claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,751,856 to Hirabayashi, hereafter Hirabayashi, in view of U.S. Patent 6,253,058 to Gharavi, hereafter Gharavi.

Hirabayashi discloses an encoding method [50] for media [image] signals comprising the steps of using a first encoder [3], a second encoder [4], and a transmitter [6]. While Hirabayashi's ROM [5a] comprises a code book [col. 8, lines 61-65], Hirabayashi does not assigned a selected first code sequence to a second code sequence, as recited in independent claim 1.

Hirabayashi discloses a decoding method [60] for encoded information, comprising the steps of using a receiver [7], a first decoder [8], a second decoder [9], and a table [5b]. Unlike independent claim 6, Hirabayashi's table does not replace first code sequences with second code sequences.

In contrast, Gharavi discloses a coding scheme for high and low quality versions of video signals, analogous to Hirabayashi's image signals. Within Gharavi's encoder [110], a mapping process occurs [col. 5, lines 4-26], transforming blocks into basic and contribution layers, respectively having low and high quality. A decoder for such signals would have to reverse this process, either reconstructing the high quality signal [col. 6, line 61] or producing low quality output.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have applied Gharavi's variable quality teachings to Hirabayashi's encoder and decoder. The motivation would have been to enable different quality grade video service subscribers to communicate with each other [col. 1, lines 60-61].

For claim 2, in the Gharavi / Hirabayashi combination, the second encoder would have higher quality than the first encoder. The first encoder would correspond to Hirabayashi's scalar quantizer [3] and Gharavi's basic layer, while the second encoder would correspond to Hirabayashi's vector quantizer [4] and Gharavi's contribution layer.

For claim 3, Hirabayashi's first and second encoders are quantizers [3/4].

For claim 4, Hirabayashi has a scalar quantizer [3] and a vector quantizer [4].


For claim 7, Hirabayashi's first and second decoders are inverse quantizers [8/9].

For claim 8, Hirabayashi has an inverse scalar quantizer [scalar code decoder 8] and an inverse vector quantizer [vector code decoder 9].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,865,291 to Zador uses both scalar and vector quantizers [col. 2, lines 46-49]. U.S. Patent 6,141,299 to Utsumi describes a decoder [7] for both high and low quality digital audio data. U.S. Patent 5,487,128 to Ozawa couples a vector quantizer [110: Fig. 6] to a scalar quantizer [140].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick G. Wamsley whose telephone number is (571) 272-1814. The official facsimile number is (571) 273-8300. An alternate facsimile number, (571) 273-1814, should only be used for unofficial documents.


Patrick G. Wamsley

December 13, 2005